

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



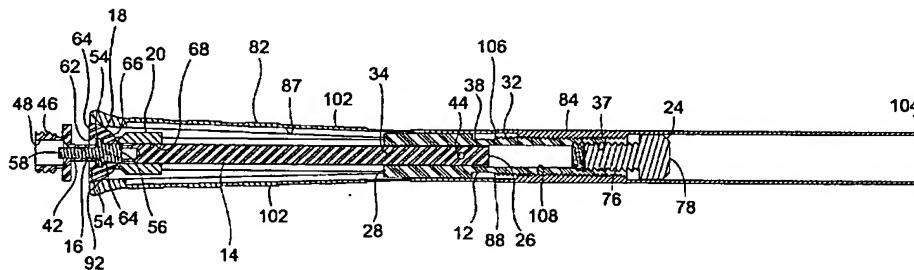
(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/048849 A1

- (51) International Patent Classification⁷: A61B 17/00 (74) Agents: ROLNICKI, Joseph, M. et al.; Thompson Coburn LLP, One US Bank Plaza, St. Louis, MO 63101 (US).
- (21) International Application Number: PCT/US2004/038175
- (22) International Filing Date: 15 November 2004 (15.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/520,278 13 November 2003 (13.11.2003) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application: US 60/520,278 (CON) Filed on 13 November 2003 (13.11.2003)
- (71) Applicants (for all designated States except US): SYNERGETICS, INC. [US/US]; 3845 Corporate Centre Drive, St. Charles, MO 63304-8694 (US). AULD, Michael, D. [US/US]; 1007 Chesterfield Forest Drive, Chesterfield, MO 63005 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SCHELLER, Gregg, D. [US/US]; 17820 Suzanne Ridge Drive, Glencoe, MO 63038 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SURGICAL INSTRUMENT HANDLE WITH ADJUSTABLE ACTUATOR POSITION



(57) Abstract: A surgical instrument handle is removably attachable to a surgical instrument head for operation of a microsurgical instrument on the head by manipulation of the instrument handle. The instrument handle has an elongate center rod with a piston mounted on the rod for reciprocating movement. The piston engages with a piston in the attached surgical instrument head for operation of the microsurgical instrument of the head. A tapered ring is mounted on the rod and engages with the piston for reciprocating the piston. A plurality of resilient arms extend along the length of the rod and engage against a sliding surface of the ring. The plurality of resilient arms are alternatively squeezed radially inwardly by the surgeon's hand and released by the surgeon's hand to allow the resilient arms to flex radially outwardly. The inward and outward movement of the plurality of arms reciprocates the piston on the handle rod to cause operation of the surgical instrument head. The radial position of the resilient arms relative to the handle is adjustable as desired by the surgeon.

WO 2005/048849 A1